Conference Abstract

The Ecosystem of Linked Biodiversity Publications: General Picture of Tools and Services Created by Plazi, Pensoft, MNHN, CETAF, Zenodo, and SIBiLS

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Abstract

A goal of natural history institutions is to contribute to the understanding of biodiversity and disseminate this knowledge through scholarly publications and other public activities. In today's world, it is expected that this knowledge, imprisoned in separated silos of millions of publications scattered through ca. 500 million published pages, is readily available for exploring and reusing by humans and artificial intelligence tools. The goal of the BiCIKL project and its key product, the Biodiversity Knowledge Hub (BKH), is to put together novel tools and services to publish and extract data from publications to create findable, accessible, interoperable and reusable (FAIR) corpus of digital data, and establish explicit links between the data in publications and cited data types (taxonomic names, gene

sequences, occurrences, images). This corpus of data is made available to the researchers and practitioners through the Biodiversity Literature Repository (BLR), the "Biodiversity PMC" digital library, Synospecies, and the OpenBiodiv knowledge graph through analytic tools, including artificial intelligence, and to a large extend through the re-use by the Global Biodiversity Information Facility (GBIF) and ChecklistBank (CLB).

This presentation will focus on the entire ecosystem of interlinked services created by Plazi, Pensoft, the Muséum national d'Histoire naturelle, Paris (Science Press), the Consortium of European Taxonomic Facilities (CETAF) e-publishing working group, the Zenodo repository at the European Center for Nuclear Research (CERN) and the Literature Services of the Swiss Insitute of Bioinformatics (SIBiLS) to enforce both novel methods for prospective semantic publishing and text and data mining of legacy literature. In the end, all knowledge, published in various journals by many publishers in different parts of the world, comes together into a standardized and re-usable open and linked FAIR data pool for the benefit of the researchers and society.

Keywords

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Conflicts of interest

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